not be tolerated for an instant, as any patent lawyer would know.

As a matter of fact, there is a case pending which shows the risk of inventing new law. A company has brought an action for the infringement of a patent for making dynamite, the question being whether a man infringes a patent by acting as custom-house agent for admitting into this country a quantity of dynamite made abroad in infringement of an English patent. The Court of Appeal has given its judgment, and the case may go to the House of Lords. None of the six pleas enumerated in the draft bill will raise the question. And they will not raise another question which came up during the trial. The plaintiff company was formed to take over the dynamite patent from a prior company which then ceased to exist. The prior company assigned the patent to the plaintiffs with some very large words as to legal rights, and it became necessary to decide whether or not the second company could sue for infringements of the patent committed while the first company held it. The defence, that the right to sue for a tort is not assignable, could not have been raised under the proposed statutory pleas. Any plea which puts in issue the title of a complainant is inadmissible.

Lastly, as to the trial of a complaint of infringement :—

By Section 59 a complaint is to be heard in the first instance by the expert commissioner who is best acquainted with the subject matter. This judge is to be guided by a legal assessor, who will direct his mind into legal channels.

"From the decision of the tribunal thus constituted" (*sic*) an appeal will lie to the three commissioners, that is to say, to the original expert who has given his decision, to his brother expert, who is not experienced in the subject matter, and to the legal expert.

In other words, suppose the patent to be for a mechanical invention, and that we have three commissioners, A, B, C, of whom A is an engineer, B is a chemist, C is a lawyer.

A hears the case and gives his judgment ; B knows nothing of mechanics, and reviews A's judgment with the advantage of having A at his side to keep him in the right path according to A's views, while C acts as a sort of legal adviser, it being part of the scheme that there shall be no models, without which it can scarcely be hoped that B and C will ever get so far as to understand the invention.

This is the mode of trial which it is gravely proposed to substitute for the present inquiry in a court of law, with a right of appeal, first, to the Court of Appeal, and afterwards to the House of Lords.

Here ends one part of the new bill. The procedure in obtaining a patent can only be carried out if commissioners are appointed according to the provisions already discussed. This would appear to be too improbable to justify any further encroachment upon your space. LEX

## "The Lepidoptera of Ceylon"

THE Colonial Government has recently presented to the library of this establishment Parts I. and II. of the work above named, for the publication of which it granted a large sum of public money. The origin of the book was the existence here at Peradeniya of a very fine series of original drawings made during a course of years by the well-known botanical draftsman in the employ of the Gardens—Mr. William de Alwis —under the careful supervision of my eminent predecessor Dr. Thwaites. The plates now published are copies of these figures (the originals are in the Colombo Museum), and to these, Mr. F. Moore has added brief technical descriptions. As a botanist it would be presumption in me to express an opinion as to the merit of the text of an entomological book. There are thirteen new genera in the first part and six in the second, but only three out of the nineteen contain any new species ; so at all events we get plenty of changes in the names of many long and well-known butterflies. But in the interests of scientific literature in general, I feel bound to enter a protest against the legend printed at the foot of every plate, "F. C. Moore, del. et lith.", as it is incorrect as to the facts. I have already stated by whom the figures were really drawn ; it is however only fair to the unassuming Sinhalese artist to allow that as put on the stone and published they are very greatly inferior to the admirable originals. One would like to think that it was a consciousness of this that led Mr. F. C. Moore to substitute his own name for that of W. de Alwis. But however this may be, it is time that some explanation was given by him of what looks like very shabby treatment of one of the best and most deserving natural history artists of the East. HENRY TRIMEN

Royal Botanical Gardens, Peradeniya, Ceylon, October 10

## An Alleged Diminution in the Size of Men's Heads

WHEN the hatter's note was brought before the Council of the Anthropological Institute, I supported its reception and publication ; my own observations have led me to the same conclusions. Setting aside for the moment the consideration of the authenticity of the statement—and I am not surprised that Prof. Flower should ask for more evidence—I would beg to call attention to the statistical results affecting infantine mortality, which are so well known to us in the statistical world. As we all know, it is a matter of congratulation that the rate of mortality in the periods from birth to two years, and from that to seven years, has much diminished in this country. This being so, the result is inevitable that many of the weaker infants that in a bygone day did not survive have now been saved ; and their survival means the survival of so many weaklings. It appears to me that this is going on in the United States and in many neighbouring parts of Europe. The question of degeneracy under sanitary influence is well worthy of attention and investigation. While on the one hand we see in the streets fewer cases of deformity and of squinting owing to orthopædic advances, there are many stunted individuals. The ears appear to me to be below the old standard in men and women. A well-formed ear was much more common in England than now. It also seems to me that the period of maturity in men (not puberty) is often later. The remark has been made that frigidity is more prevalent in women. It has come under my notice that the children of fine parents are often stunted, not belonging to the short races in the country, but being really stunted. We must always allow for a portion of the offspring belonging to the tall races, and a portion to the short races in the same family in England. My own belief is that the women are better than the men, and that when the effects of sanitary and medical improvement have become constant, that even the inferior women will exhibit a greater tendency to normal production. It is possible that the evil may be to some extent corrected by barrenness and frigidity. Looking back, I can find no effective cause in tight-lacing, as bad formerly as now, thicker or thinner hair since wigs, nor in wearing the hat.

32, St. George's Square, S.W. HYDE CLARKE

## Sound-producing Ants

WITH reference to a remark of Mr. S. E. Peal's (NATURE, vol. xxiv. p. 484) to the effect that white ants emit sounds, but not in rhythm, I have to observe that I have frequently heard white ants emit sounds with the most perfect rhythm, when, in the years 1857-1860, I was engaged in the Geological Survey of Trichinopoly, &c. On several occasions it happened that my tent was pitched on a piece of ground infested with white ants, and it was the custom of my servants to spread a thin layer of straw beneath the *satrinji* or cotton carpet that was laid on the tent floor. Often, when sitting in the tent in the quiet of the evening, I have heard the white ants at work in the straw, emitting perfectly rhythmical waves of sound at intervals of about a second, or perhaps rather more. If they were disturbed by raising the *satrinji*, the sounds ceased : to be resumed however after a minute or two, when all was quiet again.

Simla, October 15 H. F. BLANFORD

## Song of the Lizard

ANY one who has been in the South of Europe in the summer may have often heard a peculiar sound in the fields or amongst low herbage. The sound is like *wheet-t'wheet* repeated two or three times at short intervals. I have often been puzzled as to what animal it proceeded from, and should have supposed it to be some orthopterous insect, but that on getting to exactly where the sound had come from, it would again be heard at a distance of some five or six yards without having been seen. Last June, near Ajaccio, I believed I solved the puzzle. After the *wheet-t'wheet* a small lizard darted across some unusually bare ground, and, once again under cover, recommenced its song. Our great authority, Dr. Günther, is not aware of any true lizard having any vocal power (geckoes have a *tchet-tchet*—not often heard—are generally nocturnal, frequenting houses or old walls, occasionally hiding under stones during the day).

Perhaps the ability of some lizards to produce sounds such as I have here described may not be new to some of your readers.

1, Burlington Road, W., October 31 FRANCIS P. PASCOE

SEALS IN LAKE BAIKAL.—A. H. Keane wishes to know what authority there is for the statement made by E. Réclus ("Géographie Universelle," vi. 741) that seals outwardly resembling the *Phoca fœtida* of Spitzbergen are found in Lake Baikal; also what theories have been advanced to explain the presence of these Cetaceans in a freshwater lake over 1300 feet above sea-level.

NAPLES ZOOLOGICAL STATION.—For the terms on which permission can be obtained to work at the Naples Zoological Station, W. B. should write to Dr. Anton Dohrn, Stazione Zoologica, Naples.

MELAPTERURUS ELECTRICUS.—Keep it in an aquarium of fresh water, not too cold.

REV. J. F. T.—See the notice prefixed to our Correspondence Columns.

CHARLES W. HARDING.—You should communicate with the widow.

## *SEA FROTH*

IN a letter written by my nephew, Mr. Ernest Gladstone of Aberdeen, describing the recent storms, he says: "When we got within a quarter of a mile of the sea we were astonished to see great flocks of foam, like snowballs, flying in all directions. A little further on we came to one of the large hollows in the links, and we saw a sight none of us had seen before; for the whole hollow, about 100 yards long and 50 broad, was one sea of slimy foam, of which a great part must have been about 10 feet deep. This was tossing up and down as if it were the sea itself. The waves of water broke far out at sea, but great rollers of foam kept rolling in towards the links, making it impossible to come near the sea without wading up to your waist in foam for nearly a quarter of a mile, and occasionally meeting a foam-wave up to your neck."

There is nothing unusual in this phenomenon, except the large scale upon which it took place. Almost every visitor to the seaside during rough weather must have observed the formation of a persistent sea froth, which is often carried great distances by the wind. The account, however, recalled to my memory some observations on the cause of the phenomenon which I made last year at Ilfracombe.

The white foam of a breaking wave, under ordinary circumstances, disappears almost as quickly as the small bubbles of entangled air can rise through the water and burst at the surface. It occurred to me that there must be something dissolved in the sea water which gave rise to the formation of the more persistent froth, and the broken and bruised sea-weed suggested itself to my mind as a probable source of such a substance. A quantity of it was therefore gathered, allowed to stand for several hours, till in fact it had run down to a liquid, and then filtered from the dirt and organic *débris* with which it was mixed. The clear water thus obtained gave a persistent froth, like that of beer, whenever it was shaken, and I subsequently found that it contained a considerable amount of organic matter. There was no distinct indication of anything albuminous.

In order to ascertain whether this property was due to broken sea-weed, two bottles were filled with ordinary sea water. Into one of these was put freshly-torn pieces of those kinds of fucus and other marine plants which were found growing between high and low water-mark, and in the other were placed strips of healthy laminaria freshly gathered from the lower zone. The bottles were violently shaken for a few minutes. The first gave a foam which quickly disappeared, while the second produced a froth which would remain more than twenty-four hours before all the bubbles broke. It may be observed in passing that this sea-froth, whether naturally or artificially prepared, becomes very iridescent on standing.

It seems fair to conclude, therefore, that the formation of this persistent froth is due to the destruction of the sea-weed—not of that which is tossed about by every tide, but of the laminaria which is uprooted and torn by the waves only when the violent agitation of the sea reaches a sufficient depth. J. H. GLADSTONE

## *OUR WINTER REFUGES—VENTNOR*

IT is now upwards of half a century since Sir James Clark's classic work "On the Influence of Climate" in the prevention and cure of chronic diseases appeared, and among the more important results which followed its publication was the establishment of stations in this and other countries for meteorological observations, by which alone the climates of various sanatoria might be accurately compared. To Sir James is due to a great extent the merit of having placed the investigation of this important department of practical meteorology on a sound basis.

The late Dr. Martin of Ventnor was one of the most intelligent and active of the co-operating band of observers whose services were enlisted in the inquiry. A valuable series of observations was begun by him in the end of 1839, in establishing which Mr. Glaisher kindly gave his assistance and advice. The observations have since been carried on uninterruptedly, and they are evidently, particularly those of temperature and rainfall, of such a quality as quite to meet the objects aimed at. The results are presented and summarised in a just-published volume[1] by Dr. Whitehead with ability, in their bearings on the climatology of Ventnor.

The Isle of Wight occupies a high place as a favourable and commodious residence throughout the year for a large class of invalids, owing to the variety which it presents in point of elevation, soil, and aspect, and to the configuration of its hills and shores, which give distinctive climatic peculiarities to certain districts, notably to the Undercliff. These peculiarities are of no inconsiderable value in the treatment of those diseases which require a mild, equable temperature, a comparatively small rainfall, and protection from certain noxious winds.

The Undercliff extends for nearly seven miles from Bonchurch to Blackgang, with an average breadth of a third of a mile, and is completely sheltered from the north-east, north, north-west, and west winds of the Uppercliff—a range of lofty downs of chalk and sandstone which rise boldly behind the successive terraces in elevations varying from 400 to 600 feet. Since the Undercliff terminates in an unbroken perpendicular seacliff from 60 to 80 feet in height along its whole extent, the situation is not close or confined, but open and airy, and affords, besides, certain material advantages in the mitigation of sea fogs and low night temperatures. The broad belt of the Solent and Spithead separating the Isle of Wight from the mainland, and the position of the Undercliff in the extreme south of the island, considered with reference to the prevailing winds of the Channel, are also important factors in the climate of the district.

In more recent years several other meteorological stations have been established in other parts of the island and on the adjacent coast of Hampshire, from the observations of which a comparison may be made of the climatologies of this part of the South of England.

On an average of the last twenty-one years the annual rainfall of Ventnor was 30·00 inches, being all but identical with that of Osborne and Bournemouth. The amount rises successively at Hurst Castle, Ryde, and Newport, the rainfall at the last place being 34·20 inches,

[1] "The Climate of the Undercliff, Isle of Wight, as Deduced from Forty Years' Consecutive Meteorological Observations," by J. L. Whitehead, M.D.